Title (en)

INTEGRATED MAGNETIC COMPONENT AND SWITCHED MODE POWER CONVERTER

Title (de)

INTEGRIERTES MAGNETISCHES BAUTEIL UND SCHALTSTROMWANDLER

Title (fr)

COMPOSANT MAGNÉTIQUE INTÉGRÉ ET CONVERTISSEUR DE PUISSANCE À MODE COMMUTÉ

Publication

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Application

EP 17151232 A 20170112

Priority

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Abstract (en)

[origin: EP3349224A1] The invention related to an integrated magnetic component (801) for a switched mode power converter. The integrated magnetic component comprises a single magnetic core structure formed by magnetic core elements (811, 812, 813, 814), wherein at least one of the magnetic core elements (811, 812, 813, 814) is a leg-core-element with a flange (822.4) and one or more legs (820a.4, 820b.4, 821.4) are arranged on one side of the flange (822.4). The magnetic core elements (811, 812, 813, 814) of the single magnetic core structure are linearly stacked. The integrated magnetic component further comprises an isolating transformer with a higher current transformer winding (807.1, 807.2) arranged on at least one leg (821.2, 821.3) of the magnetic core elements (811, 812, 813, 814), a lower current transformer winding (806.1, 806.2) arranged on at least one leg (821.2, 821.3) of the magnetic core elements (811,812,813,814) and a first filter inductor comprising a first filter winding (808.1), arranged on at least one leg (821.1) of the magnetic core elements (811, 812, 813, 814). Herein the higher current transformer winding (807.1, 807.2) and the filter winding comprise (808.1, 808.2) at least an edgewise wound winding part. The invention further relates to a switched mode power converter.

IPC 8 full level

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